

The following claims are presented for examination:

1. (Previously presented) An apparatus comprising:

(a) a plurality of access points, wherein each of said access points is for performing a first non-empty set of protocol services, but not a second non-empty set of protocol services, for a respective network, and wherein the correctness of each protocol service in said first set is based on a maximum timing delay, and wherein the correctness of each protocol service in said second set is independent of said maximum timing delay; and

(b) a central controller for:

- (i) performing said second non-empty set of protocol services,
- (ii) receiving an input signal from each of said plurality of access points, and
- (iii) transmitting to each of said plurality of access points an output signal

based on the input signal from that access point and a protocol service that belongs to said second set of protocol services;

wherein said first set and said second set constitute a partition of the set of protocol services of a protocol stack.

2. (Previously presented) The apparatus of claim 1 wherein a protocol service in said first set belongs to a layer selected from the group consisting of: physical layer, and data link layer.

3. (Previously presented) The apparatus of claim 2 wherein said protocol service in said first set is selected from the group consisting of: a medium access control service, an error control service, and a flow control service.

4. (Previously presented) The apparatus of claim 1 wherein said protocol service in said second set is selected from the group consisting of: an authentication service, an authorization service, a traffic monitoring service, an admission control service, and a polling list maintenance service.

5. (Previously presented) The apparatus of claim 1 wherein said central controller is also for:

- (iv) receiving a datum via a wide-area network, and
- (v) transmitting said datum to at least one of said access points.

6. (Previously presented) The apparatus of claim 1 wherein said protocol stack is Institute of Electrical and Electronics Engineers 802.11e.

7. (Previously presented) A method comprising:

(a) performing one or more of a first non-empty set of protocol services using a first processor, wherein the correctness of each protocol service in said first set is based on a maximum timing delay, and wherein said first processor is programmed to perform each protocol service in said first set;

(b) transmitting a first signal to a second processor, wherein said second processor is programmed to perform each of a second non-empty set of protocol services, and wherein the correctness of each protocol service in said second set is independent of said maximum timing delay, and wherein said second processor is not programmed to perform any of said first set of protocol services, and wherein said first processor is not programmed to perform any of said second set of protocol services, and wherein said first set and said second set constitute a partition of the set of protocol services of a protocol stack; and

(c) receiving from said second processor a second signal based on a protocol service in said second set.

8. (Previously presented) The method of claim 7 wherein the performing of one or more protocol services at said first processor is in response to the detection of a first condition.

9. (Original) The method of claim 8 wherein said first condition comprises the transmission of a signal over a shared-communications channel.

10. (Original) The method of claim 8 wherein said first condition comprises an idle time interval for a shared-communications channel.

11. (Previously presented) The method of claim 8 wherein the transmission of said first signal to said second processor is in response to the detection of a second condition.

12. (Original) The method of claim 11 wherein said second condition comprises the transmission of a signal over a shared-communications channel.

13. (Original) The method of claim 11 wherein said second condition comprises an idle time interval for a shared-communications channel.

14. (Previously presented) The method of claim 7 wherein the transmission of said first signal to said second processor is in response to the detection of a condition.

15. (Previously presented) The method of claim 14 wherein said condition comprises at least one of: (i) the transmission of a signal over a shared-communications channel, and (ii) an idle time interval for said shared-communications channel.

16. (Previously presented) The method of claim 14 wherein said protocol stack is Institute of Electrical and Electronics Engineers 802.11e.

17. (Previously presented) The method of claim 7 wherein a protocol service in said first set belongs to a layer selected from the group consisting of: physical layer, and data link layer.

18. (Previously presented) The method of claim 17 wherein said protocol service in said first set is selected from the group consisting of: a medium access control service, an error control service, and a flow control service.

19. (Previously presented) The method of claim 17 wherein said protocol service in said second set is selected from the group consisting of: an authentication service, an authorization service, a traffic monitoring service, an admission control service, and a polling list maintenance service.

20. (Previously presented) A method comprising:

(a) performing a first protocol service for a first network using a first processor, wherein said first protocol service belongs to a first non-empty set of protocol services, and wherein the correctness of each protocol service in said first set is based on a maximum timing delay, and wherein said first processor is programmed to perform each protocol service in said first set;

(b) performing said first protocol service for a second network using a second processor;

(c) transmitting a first signal from said first processor to a third processor;

(d) performing a second protocol service for said first network using said third processor, wherein said second protocol service belongs to a second non-empty set of protocol services, and wherein the correctness of each protocol service in said second set is independent of said maximum timing delay, and wherein said third processor is programmed to perform each protocol service in said second set, and wherein said third processor is not programmed to perform any of said first set of protocol services, and wherein said first processor is not programmed to perform any of said second set of protocol services, and wherein said first set and said second set constitute a partition of the set of protocol services of a protocol stack;

(e) transmitting a second signal from said third processor to said first processor, wherein said second signal is based on said second protocol service;

(f) transmitting a third signal from said second processor to said third processor;

(g) performing said second protocol service for said second network using said third processor; and

(h) transmitting a fourth signal from said third processor to said second processor, wherein said fourth signal is based on a protocol service in said second set.

21. (Original) The method of claim 20 wherein said first protocol service belongs to a layer selected from the group consisting of: physical layer, and data link layer.

22. (Original) The method of claim 21 wherein said first protocol service is selected from the group consisting of: a medium access control service, an error control service, and a flow control service.

23. (Original) The method of claim 20 wherein said second protocol service is selected from the group consisting of: an authentication service, an authorization service, a traffic monitoring service, an admission control service, and a polling list maintenance service.